

PATENT COOPERATION TREATY
PCT
INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter II of the Patent Cooperation Treaty)
(PCT Article 36 and Rule 70)

Applicant's or agent's file reference DM/AJD/P13068PC	FOR FURTHER ACTION		See Form PCT/PEA/416
International application No. PCT/GB2004/004718	International filing date (day/month/year) 05.11.2004	Priority date (day/month/year) 05.11.2003	

International Patent Classification (IPC) or national classification and IPC
B01D29/23

Applicant
CLAYSON, Andrew

1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 6 sheets, including this cover sheet.
3. This report is also accompanied by ANNEXES, comprising:
 - a *(sent to the applicant and to the International Bureau) a total of sheets, as follows:*
 - sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).
 - sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.
 - b. *(sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) , containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).*

4. This report contains indications relating to the following items:

- Box No. I Basis of the opinion
- Box No. II Priority
- Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- Box No. IV Lack of unity of invention
- Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- Box No. VI Certain documents cited
- Box No. VII Certain defects in the international application
- Box No. VIII Certain observations on the international application

Date of submission of the demand

03.06.2005

Date of completion of this report

27.10.2005

Name and mailing address of the international preliminary examining authority:

Authorized Officer

European Patent Office

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Box No. I Basis of the report

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
 - This report is based on translations from the original language into the following language, which is the language of a translation furnished for the purposes of:
 - international search (under Rules 12.3 and 23.1(b))
 - publication of the international application (under Rule 12.4)
 - international preliminary examination (under Rules 55.2 and/or 55.3)
2. With regard to the **elements** of the international application, this report is based on (*replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report*):

Description, Pages

1-19 as originally filed

Claims, Numbers

1-51 as originally filed

Drawings, Sheets

1/13-13/13 as originally filed

a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing

3. The amendments have resulted in the cancellation of:
 - the description, pages
 - the claims, Nos.
 - the drawings, sheets/figs
 - the sequence listing (*specify*):
 - any table(s) related to sequence listing (*specify*):
4. This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
 - the description, pages
 - the claims, Nos.
 - the drawings, sheets/figs
 - the sequence listing (*specify*):
 - any table(s) related to sequence listing (*specify*):

* If item 4 applies, some or all of these sheets may be marked "superseded."

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Box No. IV Lack of unity of invention

1. In response to the invitation to restrict or pay additional fees, the applicant has:
 - restricted the claims.
 - paid additional fees.
 - paid additional fees under protest.
 - neither restricted nor paid additional fees.
2. This Authority found that the requirement of unity of invention is not complied with and chose, according to Rule 68.1, not to invite the applicant to restrict or pay additional fees.
3. This Authority considers that the requirement of unity of invention in accordance with Rules 13.1, 13.2 and 13.3 is:
 - complied with.
 - not complied with for the following reasons:
see separate sheet
4. Consequently, this report has been established in respect of the following parts of the international application:
 - all parts.
 - the parts relating to claims Nos. .

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or Industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	1-3, 9-14, 22, 23, 25-31, 34, 35, 38, 40-44, 48-51
	No: Claims	4-8, 15-21, 24, 32, 33, 36, 37, 39, 45-47
Inventive step (IS)	Yes: Claims	
	No: Claims	1-51
Industrial applicability (IA)	Yes: Claims	1-51
	No: Claims	

2. Citations and explanations (Rule 70.7):

see separate sheet

Box No. VII Certain defects in the international application

The following defects in the form or contents of the international application have been noted:

see separate sheet

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Reference is made to the following documents:

D1: US 4,604,203
D2: EP 0278080
D3: US 3,849,312

Item IV:

1. Unity of invention

- 1.1 The subject-matter of claim 1 and corresponding method claim 44 refers to the problem of providing a seal between a filter element and a support. The solution proposed in the above claims, namely to use the liquid to be filtered, concerns the way how different parts of the filter device are used.
- 1.2 In claim 4 and corresponding method claim 45 a cup for receiving matter from the liquid to be filtered is defined. The claims neither comprise a support nor a seal but concern the problem of receiving a substance.
- 1.3 Consequently, the present application à priori does not fulfil the requirement of Rule 13.1, since neither the combination of features nor the inherent problems to be solved (and consequently also the corresponding solutions thereof) of the groups of inventions are so linked as to form a single general inventive concept. Furthermore there is no technical connection within the solutions of the different inventions which gives expression to common inventive features.

Item V:

1. Novelty and inventive step

- 1.1 Independent claim 1 is unclear in that the form, purpose and function of the filter and the relation between the filter element and the support is not sufficiently explained (Article 6 PCT). The matter for which protection is sought is not clearly defined since the claim attempts to define the subject-matter in terms of the result to be achieved, which merely amounts to a statement of the underlying problem, without providing the technical features necessary for achieving this result. By the use of the wording "such as" the claim is not even limited to the filtration of cooking oil and to the problems or effects linked to the use of a viscous liquid but

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refers to liquid filtration in general. However, when for example a coffee filter becomes wet by the water the paper material of the filters immediately sticks to the wall of the filter support and provides a seal there between. Either the subject-matter of claim 1 is therefore not novel (Article 33(2) PCT) or it is apparent that essential features are missing, i.e. the features which are necessary to solve the technical problem of the invention, or which are necessary to achieve the advantages used in the description to justify the presence of an inventive step. Hence, the requirements of Article 6 PCT as to support by the description are not met.

The coffee filter cited above also does not contain an additional sealing device. As can be seen in document D3 disclosing a filter for cooking oil, no additional sealing device or gasket is disclosed between the walls of the housing, the frame and the filter - either the construction per se does not require an additional seal or also in this case a seal is provided by the viscous tension of the oil.

Any question of support taken apart, if an independent claim does not contain all of the essential features of the invention, it thus encompasses embodiments of the (alleged) invention which are not suitable for achieving the object or the advantages of the invention as described. In other words, there is a lack of support for the presence of an inventive step "a priori", i.e. before considering the relevance of the prior art (Article 33(3) PCT).

The same argumentation applies to independent claim 44 and to the claims which depend on claim 1.

- 1.2 Document D1, which is considered to represent the closest prior art with regard to the subject-matter of claim 4, discloses a cup shaped device being integrally formed by the filter medium. The cone-shaped filter cup is placed on a rigid support which comprises annular portions and the device comprises an inlet for receiving oil from a conduit above the filter and an outlet which leads to a container below the filter (see D1, abstract and figures 1,2). Accordingly, the subject-matter of claims 4-8, 15, 17-21, 24, 32, 33, 39 and 45-47 is not novel (Article 33(2) PCT).
- 1.3 In addition, document D2 discloses a cup-shaped filter for cooking fat which is integrally formed of a sheet form member having filtering properties. The filter is

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positioned within a rigid support which comprises transport openings for the filtered fat or oil (see D2, abstract and figure 1). Thus, the subject-matter of claims 4-8, 15, 16, 19, 32, 36, 37 and 45-47 is also in view of the disclosure of D2 not novel (Article 33(2) PCT).

- 1.4 The subject-matter of the other dependent claims seems to contain only features which are either known from the prior art and which a skilled person could easily combine without any inventive skill, or which are the result of a normal design procedure followed by a skilled person (Article 33(3) PCT).
2. **Industrial application**
The industrial applicability is obvious.

Item VII

Further deficiencies

The features of the claims are not provided with reference signs placed in parentheses (Rule 6.2(b) PCT).